PHYSICIAN ORDERS
FOR
Initial Management of Suspected
DIABETIC KETOACIDOSIS in the
EMERGENCY DEPARTMENT
Page 1 of 2

Weight: _____ kg   Height: _____ cm   Allergies: ____________________________________________

REFER to PEDSPAC DKA ALGORITHM
Initial on all lines applicable

DIET:
_____ NPO    _____ Ice chips

VITAL SIGNS/MONITORING:
• Cardiorespiratory monitor, RR, HR, BP, Neuro VS including headache assessment q1h
• Administer oxygen 10-15 L/min by non-rebreather mask (if signs of shock)
• Strict Ins & Outs
_____ Other: ____________________________________________________________

INITIAL INVESTIGATIONS:
• Na, K, Cl, glucose, creatinine, urea, venous blood gas, serum osmolality
• POCT urinalysis
• If new onset diabetes: TSH, thyroid antibodies, HbA1c (If available)
_____ Other: ____________________________________________________________

ON-GOING INVESTIGATIONS:
• Bedside glucose q1h until dextrose added to IV then q2h (also at initiation of insulin and 1 hour after any change in insulin dose)
• Na, Cl, K, glucose, venous blood gas, serum osmolality q2-4h
• POCT urinalysis q4h

INITIAL FLUID RATES (HOURS 0 – 12):
Initial Fluids (for patients with signs of cerebral edema, see Page 2)
• NS bolus of _______ mL (10 mL/kg) IV over 30 minutes, THEN
  ____ Repeat NS bolus of _______ mL (10 mL/kg) IV over 30 minutes if signs of hypoperfusion (tachycardia, cap refill >2 sec, cool extremities), THEN
  ____ NS at _______ mL/hr IV (SEE FLUID RATE TABLE BELOW)

<table>
<thead>
<tr>
<th>Weight</th>
<th>5 – &lt;10 kg</th>
<th>10 – &lt;20 kg</th>
<th>20 – &lt;40 kg</th>
<th>≥40 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>mL/kg/hr</td>
<td>6.5</td>
<td>6</td>
<td>5</td>
<td>4 (MAX 250 mL/hr)</td>
</tr>
</tbody>
</table>

On-going Fluids
_____ Add 40 mmol/L KCl to initial fluids once serum K+ is less than 5 mmol/L AND patient has voided
• If blood glucose is less than 15 mmol/L OR decreases by more than 5 mmol/L per hour once the glucose is less than 25 mmol/L, change fluids to:
  D10NS with _______ mmol/L KCl at _______ mL/hr IV (SEE FLUID RATE TABLE ABOVE)

Insulin
• Do not start insulin until 1 hour after IV fluids have been started (not longer than 2 hours)
_____ Insulin regular 1 unit/mL at 0.1 units/kg/hr IV

*** Ensure nurse is aware of page 2 at the time of completion ***  Continued on Page 2 …
Initial Management of Suspected DIABETIC KETOACIDOSIS in the EMERGENCY DEPARTMENT

Patient Identification

Weight: ______ kg      Height: ______ cm      Allergies: ________________________________

... Continued from Page 1

Initial on all lines applicable

CONSULT:
- Pediatric Diabetes/Endocrinology or Pediatric Specialist
- PICU – Pediatric Referral Centre (if pH less than 7.1, age less than 5 years, hypotension, or suspected cerebral edema)

FOR SUSPECTED CEREBRAL EDEMA
Glasgow Coma Scale less than 14, and/or irritability in younger children, and/or Cushing’s triad: ↑BP, ↓HR, ↓RR
- Move to Resuscitation area
- Nurse in continuous attendance of patient
- Raise head of the bed to 30°

IV FLUIDS
- Decrease IV fluids to 60% of initial IV Fluid Rehydration Rates (SEE FLUID RATE TABLE BELOW):

If hypoperfused (tachycardia, cap refill >2 sec, cool extremities)
- NS bolus of ______ mL (10 mL/kg) IV over 30 minutes

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<tr>
<td>mL/kg/hr:</td>
<td>3.9</td>
<td>3.6</td>
<td>3</td>
<td>2.4 (MAX 150 mL/hr)</td>
</tr>
</tbody>
</table>

- 3% NaCl ________ mL (5 mL/kg/dose, MAX 250 mL) IV over 10 minutes OR
- Mannitol ________ g (0.5-1 g/kg/dose, MAX 100 g) IV over 15 minutes
- STAT CT head scan (Should be done at the Pediatric Referral Centre)

PHYSICIAN SIGNATURE                  PRINT NAME OF PHYSICIAN                  DATE & TIME

NURSE SIGNATURE                      PRINT NAME OF NURSE                      DATE & TIME